Reply to Office Action of September 8, 2005

Amendments to the Specification:

Please amend the paragraph beginning on page 1, at line 4 as shown below:

This application is related to co-pending application "Network Management Method and System for Managing a Broadband Network Providing Multiple Services" application serial number 09/851,234 filed concurrently, co-pending application "Method and System for Generating Geographic Visual Displays of Broadband Network Data" application serial number 09/850,910 filed concurrently, and co-pending application "Method and System for Provisioning Broadband Network Resources" application serial number 09/851,235 filed concurrently.

Please amend the paragraph beginning on page 7, at line 4 as shown below:

HFC network 12 is operable for receiving and transmitting telephony, data, and video signals from/to a telephony service network 18, a data service network 20, and a video service network 22. HFC network 12 distributes telephony, data, and video signals from respective networks 18, 20, and 22 to a customer 14 connected to the HFC network. Telephony service network 18 includes a local switch 24 for connecting the public switched telephone network (PSTN) 26 to HFC network 12 and a local switch operations center 28 for controlling the local switch. Similarly, data service network 20 includes a data router 30 for connecting an Internet Protocol (IP) data network 32 to HFC network 12 and [[a]] an Internet Service Provider (ISP) operations center 34 for controlling the router. Video service network 22 includes a video controller 36 for connecting a video source 38 to HFC network 12 and a video operations center 40 for controlling the video controller.

Please amend the paragraph beginning on page 8, at line 5 as shown below:

The head end of HFC network 12 is located within hub office 52 and connects with CMTS 54, HDT 56, and video equipment 58 for distributing the data, telephony, and video signals to/from customer 14. Specifically, HFC network 12 includes a combiner / splitter network 60 connected to CMTS 54, HDT 56, and video equipment 58. communicating signals to customer 14, combiner / splitter network 60 combines the data, telephony, and video signals into a combined signal and provides the combined signal to optical

S/N: 09/851,285

Reply to Office Action of September 8, 2005

equipment 62. Optical equipment 62 (such as a primary or secondary hub ring) converts the combined signal into an optical signal and distributes the combined optical signal to a fiber node 64 via optical fibers 66. Fiber node 64 is generally located in the neighborhood of customer 14. A typical fiber node serves up to 1,200 customers and is powered by a power supply 75. Power supply 75 generates status information and has a transponder for communicating the status information to HFC network management system 16. Fiber node 64 converts the combined optical signal into a combined electrical signal for distribution on coaxial cable 68 located in the neighborhood of customer 14. An amplifier 70 amplifies the combined electrical signal and then provides the combined electrical signal to a fiber coax node bus 73 and a port 72 associated with customer 14.

In general, HFC network management system 16 provides mechanization and automation of operation tasks for HFC network 12. In order to support these operation tasks, network management layer 84 of HFC network management system 16 includes HFC network manager 88, a fault manager 90, and a network configuration manager 92. Fault manager 90 includes a geographical information system tool referred to herein as an alarm visualization tool (AVT). AVT 90 supports visual correlation of network elements and customer impact. Network configuration manager 92 includes a service, design, and inventory (SDI) system 93 having a database representing HFC network 12. The database of SDI system 93 stores data representing the assigned capacity of HFC network 12. Network configuration manager 92 further includes an online provisioning application link (OPAL) 95. OPAL 95 accommodates automated provisioning of services to customers. The association of HFC system- and service-specific network elements and associated facilities provides surveillance and fault management tools that aid NOC 94 and local operations center 104 to respond to service affecting network events.